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UNITED STATES DEPARTMENT OF AGRICULTURE
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HOUSEKEEPERS' CHAT Saturday, May 2, 1936

(FOR BROADCAST USE ONLY)

Subject: "NEWS NOTES FROM WASHINGTON." Items of interest to women from the United States Department of Agriculture.

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Hello, homemakers. . . . I know that Saturday is a busy day, and as a rule *not* the day I'd select to tell a story. However, there are stories *and* stories -- and this one is quite appropriate for a busy Saturday. It comes by way of our Washington correspondent, from the federal Bureau of Home Economics. The title is: "The Discovery of Vitamins."

"Their discovery," writes our correspondent, "was one of the most important in the history of the science of foods and nutrition, so important that two of the pioneers in vitamin research, Dr. Christian Eijkman (*Ike*-man) and Sir F. Gowland Hopkins, were awarded a Nobel prize in 1929."

And here is the story, quoting directly from the federal Bureau of Home Economics:

"The story dates back some 35 years, to the beginning of this century. Before then vitamins were unheard of, although some scientists had come to think that there was more to the chemical composition of food than had as yet been dreamed of. Then Doctor Eijkman, a young Dutch medical officer stationed in Java, made a discovery. He saw many cases of a very old affliction, common among the peoples of the Eastern Hemisphere, called beriberi. He also saw *chickens* with the same affliction. So he experimented with the chickens and found that if they were fed on rice from the people's left-over meals the chickens also were afflicted, and at first he thought there was something wrong with the rice. Then he found that if he fed the chickens the rice *polishings*, containing the outer skin of the rice grain, they did not have beriberi, or they recovered if they had it. So he was convinced there was something in the outer coat of the rice which chemists had not yet discovered. About the same time the English scientist, F. Gowland Hopkins, found that his laboratory animals stopped growing when he fed them just the pure substances known to be contained in milk, but they started growing again as soon as he gave them a few drops of real milk. So here was evidence of something hitherto unrecognized in the composition of milk.

"These discoveries started the search for the unknown food substance -- which has now turned out to be six, seven, and maybe more separate new substances. They appeared to be of one family, and Dr. Casimir Funk, a Polish scientist, called the first one a *vitamine*. The name is a coined word, from *vita* meaning life, and *amines*, the chemical name for a group of substances to which the first of the new discoveries was mistakenly supposed to belong. But the name vitamin was kept (without the *e*).

"The vitamins were not discovered all at once, but singly, one after another. Their names do not indicate the order of their discovery,-- first came vitamin B, then vitamin A, then vitamins C, D, E, and G. At least one more is known to exist, but there is no vitamin F, so far.

"Vitamin-rich foods are not a class by themselves. The housekeeper should know all the vitamins in order to choose a sufficient variety of foods to provide a good diet for her family.

"Vitamin E is easy to supply. It is found in so many of the common foods that we could hardly escape getting it if we tried. It is not easily destroyed in cooking, and this is one of the vitamins the body can store in its tissues. So vitamin E need give the housekeeper no special concern.

"Vitamin G is another that is still being studied to find out its true relationships. Like the rest, it is necessary to good nutrition. Apparently this vitamin, or rather the lack of it, is related to the deficiency disease called pellagra.

"Vitamin G, however, is not difficult to supply. It is found in many different kinds of food, and it stands cooking. Good sources of this vitamin are milk in all its forms, lean meats, green vegetables, peanuts, soybeans, and whole wheat. Particularly rich in vitamin G are such meats as liver and kidneys, and such greens as turnip tops, kale, and mustard.

"In short, a meal that includes milk, whole wheat bread, lean meat, potatoes and a green vegetable provides both vitamin E and vitamin G.

"With the other four vitamins, as happens so often all through the story of food values and diet, the foods that are best sources of one may be poor sources of another. Vitamin A is found in certain foods from animal sources, also in the yellow and green parts of vegetables and fruits, and is not very sensitive to heat. Vitamin A is never too plentiful for our normal requirements. Vitamin D is supplied in very few foods. Vitamins B and C, which are found in many foods, dissolve in water, and are also sensitive to heat, so the foods containing them require special treatment in cooking. These last four vitamins, then, for one reason or another, are not quite so easily provided in the ordinary routine of meal-planning as are vitamins E and G. Each, in fact, is another and separate story."

And so concludes today's report from our official correspondent with the Department of Agriculture.

On Monday, we'll have a story from the United States Food and Drug Administration about catching and canning that delicate pink sea food -- the shrimp.

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